



Department of Energy

Southwestern Power Administration
One West Third Street
Tulsa, Oklahoma 74103-3519

MAR 3 0 2010

Mr. Terry Breyman
Council on Environmental Quality
722 Jackson Place, NW.
Washington, DC 20503

Ref: "Principles and Standards" Revision

Dear Mr. Breyman:

Thank you for the opportunity to provide comments on the Council on Environmental Quality's (CEQ) Proposed National Objectives, Principles and Standards for Water and Related Resources Implementation Studies (Proposed P&S), which is the first phase of the planned revision of the Economic and Environmental Principles and Guidelines for Water and Related Land Resources Implementation Studies (P&G). Southwestern Power Administration (Southwestern) is an agency within the Department of Energy that markets hydroelectric power from 24 multi-purpose reservoir projects constructed and operated by the U.S. Army Corps of Engineers (Corps), located in the states of Arkansas, Missouri, Oklahoma, and Texas. Southwestern's marketing region includes those four states as well as Kansas and Louisiana.

Southwestern has several general comments regarding the CEQ's Proposed P&S. Southwestern's specific comments are provided in the attached document.

Public Law 110-114, Section 2031(b) (2) directs the Secretary (of the Army), in reference to the P&G, to "*issue revisions... to the principles and guidelines for use by the Secretary in the formulation, evaluation, and implementation of water resources projects.*" It is unclear in the Proposed P&S issued by CEQ by what authority CEQ has taken on the revision of the P&G and by what authority the P&G revised by CEQ will be applicable to all Federal agencies rather than the four agencies identified in the existing P&G instituted in 1983. Additionally, the Proposed P&S appears to deemphasize economic development benefits while promoting environmental protection and restoration, without quantifying the economic benefit of such protection and restoration. Southwestern believes that environmental protection and restoration can and should be quantified economically in order to achieve a balanced approach toward co-equal objectives as is dictated by the national priorities stated in Public Law 110-114, Section 2031(a).

The Proposed P&S contains several inconsistencies, unclear terms, and arbitrary or vague mandates that render it problematic to implement practicably. The Proposed P&S does not provide a clear objective or objectives based upon the priorities given in Public Law 110-114, Section 2031(a). Some objectives presented are later repeated verbatim as a few of multiple principles and standards, rendering the intent and direction unclear and inconsistent. Additionally, there is no clear threshold or standard for evaluating which projects should be covered by the revised P&G.

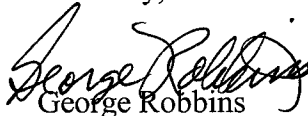
The Proposed P&S directs the comparison of the non-quantifiable impacts of different alternatives without direction on how that is to be achieved. Additionally, the Proposed P&S provides monetary and non-monetary categories for classification of impacts that are both quantified and unquantified for evaluation of alternatives and requires that all impacts are considered in a balanced approach to determine the net combined contribution of each alternative. The Proposed P&S approach for evaluating alternatives differs greatly from the existing P&G instituted in 1983, which provides for evaluation of alternatives by assessing impacts in four different accounts; however, only the national economic development (NED) account, which assesses impacts in only monetary terms, is required. As this critical part of the process has changed so significantly, the Proposed P&S should elaborate on how to balance the comparison across categories in a consistent, integrated manner.

As drafted, the Proposed P&S does not provide clear objectives, principles, and standards that are consistent with the national priorities stated in Public Law 110-114, Section 2031(a) nor does it present a planning process that is a practical framework for the balanced approach required to implement the national priorities. Southwestern suggests that the Proposed P&S must be extensively revised in order to be implemented practicably and be compliant with Federal statute.

Public Law 110-114, Section 2031(b) (4) (A) requires that “...*the Secretary shall consult with ...the Secretary of Energy.....*” and the CEQ’s public register notice issued December 9, 2009 (Vol. 74, No. 235) states “...*CEQ will lead an interagency effort to finalize the Principles and Standards and draft the Procedures sections of the Principles and Guidelines.*” Southwestern, as an agency within the Department of Energy, requests inclusion when CEQ begins its interagency coordination efforts.

Southwestern looks forward to working with CEQ on the revision of the P&G. Please keep us informed of all actions and outcomes of the revision process. If you have any questions, please contact me at (918) 595-6680 or Ms. Fritha Ohlson at (918) 595-6684 or email at fritha.ohlson@swpa.gov.

Sincerely,

A handwritten signature in dark ink, appearing to read "George Robbins", is written over the printed name.

George Robbins

Director,
Division of Resources and Rates

Enclosure

Southwestern Power Administration (Southwestern)
Specific Comments on
CEQ's Proposed National Objectives, Principles and Standards for Water and Related
Resources Implementation Studies (Proposed P&S), dated December 3, 2009

Authority of CEQ to Revise the P&G

- Public Law 110-114 Section 2031 (b) (2) states “*IN GENERAL.—Not later than 2 years after the date of enactment of this Act, the Secretary shall issue revisions, consistent with paragraph (3), to the principles and guidelines for use by the Secretary in the formulation, evaluation, and implementation of water resources projects.*” It is unclear in the Proposed P&S issued by CEQ by what authority CEQ has taken on the revision of the P&G.
- The principles and guidelines are defined in Section 2031 (b) (1) to be “*the principles and guidelines contained in the document prepared by the Water Resources Council pursuant to section 103 of the Water Resources Planning Act (42 U.S.C. 1962a-2), entitled “Economic and Environmental Principles and Guidelines for Water and Related Land Resources Implementation Studies”, and dated March 10, 1983.*” (1983 P&G). The P&G instituted in 1983 states “*Implementation studies of the following agency activities are covered by these principles: (a) Corps of Engineers (Civil Works) water resources project plans; (b) Bureau of Reclamation water resources project plans; (c) Tennessee Valley Authority water resources project plans; (d) Soil Conservation Service water resources project plans.*” It is unclear by what authority the P&G revised by CEQ will be applicable to all Federal agencies rather than the four agencies identified in the existing P&G instituted in 1983.

De-emphasis of Economic Development Benefits

- CEQ's Proposed P&S “Proposed National Objectives for Water Resource Planning” Section 3 (first page lines 40-44 and second page lines 1-5) provides three considerations as consistent with the National Objective, which appear to be similar to the considerations provided as part of national water resources planning policy in Public Law 110-114, Section 2031 (a). However, the rewording in the Proposed P&S places specific emphasis on protecting and restoring the natural environment and de-emphasizes economic development by relegating the only mention of economic development to a qualifier of “protecting and restoring natural ecosystems and the environment” and by changing the wording from “maximize sustainable economic development” to “encouraging sustainable economic development”. Suggest maintaining the wording from Public Law 110-114, Section 2031 (a) in the Proposed P&S so that it properly reflects national priorities. The wording of both is as follows:
 - CEQ Proposed P&S wording:

Consistent with this objective, the United States will demonstrate leadership by

modernizing the way the Nation plans water resources projects by:

- (1) protect and restore natural ecosystems and the environment while encouraging sustainable economic development;
- (2) avoiding adverse impacts to natural ecosystems wherever possible and fully mitigating any unavoidable impacts; and
- (3) avoiding the unwise use of flood plains, flood-prone areas and other ecologically valuable areas.

o Public Law 110-114, Section 2031 (a) wording:

It is the policy of the United States that all water resources projects should reflect national priorities, encourage economic development, and protect the environment by—

- (1) seeking to maximize sustainable economic development;
- (2) seeking to avoid the unwise use of floodplains and flood-prone areas and minimizing adverse impacts and vulnerabilities in any case in which a floodplain or flood-prone area must be used; and
- (3) protecting and restoring the functions of natural systems and mitigating any unavoidable damage to natural systems.

- In Chapter I, Section 1 (pages 1-2), the Principles presented again place specific emphasis on protecting and restoring the natural environment and de-emphasize economic development. Of the 13 Principles presented, economic development is only mentioned as a qualifier in the first Principle: “Protect and restore natural ecosystems and the environment while encouraging sustainable economic development.” As stated above, Public Law 110-114, Section 2031 (a) provides “seeking to maximize sustainable economic development” as the first of three considerations of national water resources planning policy.
- Chapter II, Section 2.I. (page 11 lines 14-39) is titled “Address Risk and Uncertainty, Including the Effects of Climate Change and Future Development”. In the subsequent description of this Standard, climate change is addressed specifically. However future development is not addressed specifically. Is there a reason for this omission?
- In Chapter II, Section 3.J.(3) (page 23 lines 5-9) states “Decisions to select alternatives for further consideration should emphasize contributions to the National Objectives and areas of special consideration, including achieving public safety, environmental justice, equal treatment for low income and minority communities, and the application of nonstructural solutions.” These areas of special consideration are essentially several of the Principles/Standards presented earlier in the Proposed P&S. Reasoning is not provided as to why certain Principles/Standards should be considered above others.
- Several sections of the Proposed P&S (listed below) refer to specific statutes that relate to environmental protection and restoration, whereas statutes pertaining to other water resources interests are not presented. The omission of other applicable statutes, such as Section 5 of the Flood Control Act of 1944 which provides Southwestern’s authorization

for the hydropower purpose, de-emphasizes objectives other than environmental protection and restoration.

- Chapter I, Section 2.G.(a) (page 2 lines 37-40)
- Chapter II, Section 3.H.(4) (page 17 lines 16-22)

Inconsistencies, unclear terms, and arbitrary or vague mandates

- It is not clear in the Proposed P&S if there is one national objective or if there are multiple national objectives.
 - The entire Proposed P&S refers to national objectives in the plural, but it is not clear in the document if there are multiple national objectives or one national objective. “Proposed National Objectives of Water Resource Planning” Section 3 (first page lines 38-40) states “The National Objective for water resources planning is to develop water resources projects based on sound science that maximize net national economic, environmental, and social benefits. Consistent with this objective...” This wording implies that there is one national objective.
 - “National Objectives of Water Resource Planning” Section 3 (first page line 43 through second page line 5) provides three considerations as consistent with the National Objective:
 - “(1) protect and restore natural ecosystems and the environment while encouraging sustainable economic development;
 - (2) avoiding adverse impacts to natural ecosystems wherever possible and fully mitigating any unavoidable impacts;
 - (3) avoiding the unwise use of flood plains, flood-prone areas and other ecologically valuable areas.”

These considerations are repeated in the Proposed P&S, with some slight re-wording, as Principles in Chapter I, Section 1 (page 1 lines 18-19, 23-24, 36-37) as Principles A, C, and H (and again later in Chapter II as Standards):

- “A. Protect and restore natural ecosystems and the environment while encouraging sustainable economic development;
- C. Avoid the unwise use of floodplains, flood-prone areas and other ecologically valuable areas;
- H. Account for significant effects and mitigate any unavoidable adverse impacts to natural ecosystems;”

What is the reason for calling out only these specific Principles/Standards in the “National Objectives of Water Resource Planning” section? Are these three Principles/Standards also considered National Objectives and should they not belong as one or the other? Suggest clearly defining the objectives, principles, and standards and use wording consistent with Public Law 110-114, Section 2031 (a) in the Proposed P&S so that the objectives, principles, and standards properly

reflects national priorities.

- In most instances in the Proposed P&S the term “National Objectives” is used and it is assumed that this refers to the National Objective(s) for Water Resources Planning presented at the beginning of the PROPOSED P&S. However, in Chapter I, Section 2 (page 2 lines 11-12, page 2 lines 42-43) the term “National Water Resources Planning Objectives” is used. One would assume this is the same thing as the National Objectives, but using inconsistent wording makes it not entirely clear. Suggest using consistent wording throughout the Proposed P&S.
- The major steps for the planning process in the Proposed P&S are outlined in a different manner and order between Chapter I, Section 2 (page 2) and Chapter II, Section 3 (pages 13-23). Examples of the differences are as follows:
 - In the Chapter I outlined planning process, the steps call for first identifying the study objectives (step A, page 2 lines 10-12), next identifying the problems, needs and opportunities associated with the study objectives (step B, page 2 lines 14-15), and last determining the existing and future (without-plan) conditions (step C, page 2 lines 17-19). However, in the Chapter II outlined planning process, the steps call for first determining the existing and future (without-plan) conditions (step D, page 15 lines 2-38), next identifying the problems and opportunities based upon the without-plan conditions (step E, page 15 line 41 through page 16 line 7), and last specifying the study objectives based upon the problem and opportunity statements (step F, page 16 lines 10-18).
 - In the Chapter II planning process there is a step for specifying the planning constraints (step G, page 16 lines 21-25). However specifying planning constraints is not mentioned in the Chapter I planning process.
 - In the Chapter I planning process the term “planning setting” is used in this context: “Identify and assess the water and related resources problems, needs, and opportunities relevant to the planning setting associated with the study objectives;” (step B, page 2 lines 14-15). The term “planning setting” is not used in the Chapter II planning process or elsewhere in the Proposed P&S and it is not defined in the Glossary, and it remains unclear exactly what it refers to.
- Throughout the Proposed P&S the terms “problems, needs, and opportunities” are used as well as similarly stated “problems and opportunities.” Suggest defining what is meant by problems, what is meant by needs, and what is meant by opportunities, and suggest evaluating whether the statements should be consistent throughout the Proposed P&S or if there is a reason to exclude “needs” from the statement in some cases.
 - Stated as “problems, needs and opportunities” – Proposed National Objectives for Water Resources Planning first page lines 17 and 26, page 2 line 14, page 7 line 25, page 15 line 5, page 15 line 41 through page 16 line 7, page 17 lines 35-36
 - Stated as “problems and opportunities” – page 2 line 18-19, page 11 line 36, page 14 line 22, page 22 lines 36-37, page 25 lines 3-4, page 25 lines 6-7, page 26 lines 31-32

- Chapter II, Section 1.A. (page 4 lines 11-13) reads: “Modifications also include significant changes in features or operations that materially affect project impacts, rehabilitation, safety, reallocation, termination, and removal.” This sentence is confusing as written and could be interpreted at least two different ways:

- The sentence could be stating that modifications also include the following:
 - Significant changes in features or operations that materially affect project impacts;
 - Rehabilitation;
 - Safety;
 - Reallocation;
 - Termination;
 - And Removal.

Read this way, it is unclear how “safety” is a modification.

- The sentence could be stating that modifications also include significant changes in features or operations that materially affect the following:
 - project impacts;
 - Rehabilitation;
 - Safety;
 - Reallocation;
 - Termination;
 - And Removal.

Read this way, it is understandable how significant changes in features or operations can materially affect project impacts, rehabilitation (of the natural environment), and safety, but it is unclear how significant changes in features or operations materially affect reallocation, termination, and removal.

Suggest rewording the sentence so that the meaning is clear.

- Chapter II, Section 2.E.(1) (page 9 lines 18-20) reads: “Water resources planners and decision makers shall utilize the best available principles, data, analytical techniques, procedures, and tools in hydrology, engineering, economics, biology, risk and uncertainty, and other sciences.” As “risk and uncertainty” is not a discipline or science, suggest rewording to “risk and uncertainty assessment” or something to that effect.
- Suggest adding “Environmental Justice” to the Glossary. Also, references to environmental justice and to low income, tribal, and minority are inconsistent and redundant, as shown in the following examples:
 - Chapter II, Section 2.K. (page 12 lines 9-10), only mentions low income but is probably applicable to low income, tribal, and minority.

- Chapter II, Section 2.K. (page 12 line 18), leaves out tribal (only low income and minority), but would expect it should include tribal as well.
- Chapter II, Section 3.I.(4)(b)3. (page 20 lines 38-40) states “It shall address any disproportionately high and adverse human health or environmental effects on minority populations. Effects on low-income populations shall be addressed in order to assure environmental justice.” The statement leaves out tribal. The two sentences could be combined and include all three, such as “It shall address any disproportionately high and adverse human health or environmental effects on low income, tribal, and minority populations in order to assure environmental justice.”
- Chapter II, Section 3.J.(3) (page 23 lines 8-9 and lines 10-11): It seems redundant to state both “environmental justice” and “equal treatment for low income and minority communities”. Is environmental justice not inclusive of equal treatment for low income and minority communities? Suggest rewording these two statements into one such as “environmental justice for low income, tribal, and minority communities”.
- The Proposed P&S is not consistent in statements regarding the minimum array of alternatives required. Recommend statements regarding the minimum array of alternatives are consistent throughout the Proposed P&S. Following are examples of conflicting statements:
 - Chapter II, Section 3.J.(2) (page 22 lines 38-41) states “As a minimum, the final array shall include the No Action alternative, the primarily nonstructural alternative, and the environmentally preferable alternative. The No Action and environmentally preferable alternatives may be the same.”

However, Chapter II, Section 3.H.(2) (page 16 line 42 through page 17 line 1) states that a primarily nonstructural alternative is not required if it can be documented why. “In some cases, a technically and environmentally viable, primarily non-structural alternative might not exist. If so, the study shall document efforts to identify such an alternative and explain why no such alternative other than the No Action alternative could be formulated.”
 - Chapter II, Section 3.J.(2) (page 22 lines 38-41) state “As a minimum, the final array shall include the No Action alternative, the primarily nonstructural alternative, and the environmentally preferable alternative. The No Action and environmentally preferable alternatives may be the same.” It seems possible that one alternative could fit under all three of these criteria. Is one alternative acceptable or are there a minimum number of alternatives required?
 - Chapter II, Section 3.H.(2) (page 16 line 42 through page 17 line 1) states “In some cases, a technically and environmentally viable, primarily non-structural alternative might not exist. If so, the study shall document efforts to identify such an alternative and explain why no such alternative other than the No Action alternative could be formulated.” The statement implies that the technically and environmentally viable alternative is the same as the primarily non-structural alternative. Suggest rewording to state “In some cases, a technically and

environmentally viable alternative or a primarily non-structural alternative might not exist. If so, the study shall document efforts to identify such an alternative and explain why no such alternative other than the No Action alternative could be formulated.”

- The term “category” is incorrectly used in place of “sub-category” in several places in the Proposed P&S, as described below. Suggest correcting these inconsistencies in the Proposed P&S.
 - Chapter II, Section 3.I.(4)(a)3. (page 19 line 16) states “categories” and should state “sub-categories” as it is referring to the two monetary sub-categories that are subsequently defined.
 - Chapter II, Section 3.I.(8) (page 21 line 43) states “An effect may be shown only once within a given category” and should state “An effect may be shown only once within a given sub-category”.
 - Chapter II, Section 3.I.(8) (page 21 line 44) states “Other Social Effects category” and should state “Other Social Effects sub-category”
 - Chapter II, Section 3.I.(8) (page 22 line 1) states “once in a given category” and should state “once in a given sub-category”
 - Chapter II, Section 3.J.(1) (page 22 line 32) states “five categories” and should state “five sub-categories”
- In several instances, the Proposed P&S refers to an objective that gives preference to a primarily non-structural alternative, however that objective is not explicitly stated elsewhere in the Proposed P&S.
 - Chapter II, Section 3.J.(3) (page 23 lines 5-9) states “Decisions to select alternatives for further consideration should emphasize contributions to the National Objectives and areas of special consideration, including achieving public safety, environmental justice, equal treatment for low income and minority communities, and the application of nonstructural solutions.” Theses stated “areas of special consideration” refer back to a few of the Principles except for “the application of nonstructural solutions” which is not explicitly stated in the Principles or the Proposed National Objectives for Water Resources Planning.
 - Chapter II, Section 3.K.(1)(b) (page 23 lines 26-28) states “If the recommended plan is not a primarily non-structural alternative, the decision maker must explicitly address the reasons why these objectives are not reasonably achievable;” It is unclear what objectives are being referred to as there are not objectives stated in the Proposed P&S that specify a primarily non-structural alternative.
- Chapter II, Section 2.E.(1) (page 9 lines 23-25) states “Planners shall continuously seek to modernize tools and analytical techniques and not simply rely upon those used in the past because they are familiar.” This statement implies that contemporary/modern approaches are preferable to proven approaches. It should be written to clarify that the best and most appropriate approach is to be taken, not just the newest.
- Chapter II, Section 2.E.(1) (page 9 lines 26-30) provides for a limit on data that is over

five years old, but with caveats regarding the validity of data. The five year limit on data appears arbitrary and is essentially over-ridden by the caveat provided. Suggest re-wording this section to eliminate the limit on data over five years old, stating something to the effect of “The data used shall be the best available. The data used to portray existing and future conditions should be clearly shown to be valid and representative of current conditions.”

- Chapter II, Section 2.F. (page 9 lines 43-44) states “The level of detail applied in implementation studies may vary, but shall not be greater than needed to inform the decision efficiently and effectively” The sentence would make just as much sense stating “less” instead of “greater”. Suggest that this sentence is not necessary given that the following statements are more constructive in describing the level of detail desired.
- Chapter II, Section 2.H.(2)(c) (page 11 lines 2-3) states “Compensatory mitigation may not substitute for avoiding and minimizing impacts.” It is unclear what is meant by this statement, as “compensatory mitigation” is provided as the step to take after avoiding and minimizing impacts have been determined to not be practicable.
- Chapter II, Section 3.I.(10) (page 22 lines 11-12) states “Costs and benefits shall be discounted using rates prescribed by law or executive order.” The statement as written does not provide for the case in which a discount rate is not prescribed by law or executive order. Suggest changing the statement to one of the following:
 - “Costs and benefits shall be discounted using the _____ rates unless prescribed by law or executive order,” where reference to a specific set of rates is given.
 - “Costs and benefits shall be discounted using the rates prescribed by each agency’s specific procedures unless prescribed by law or executive order,” if it is intended that a specific set of rates would be established in each agency’s specific procedures. However, this approach could result in inconsistency across agencies.
- Several terms used in the Proposed P&S appear to allow for subjectivity in the planning process and could allow for discrepancies in how the Proposed P&S is applied for different projects and across different agencies. Suggest defining the terms in the Proposed P&S or stating that the terms will be defined by each agency in the agency’s specific procedures, recognizing that could result in inconsistency across agencies.
 - The term “extent practicable” is used throughout the Proposed P&S. How is “extent practicable” to be determined or defined in the following instances?
 - Chapter II, Section 2.E.(1) (page 6 lines 23-26) states “Preserve and restore the hydrologic and natural resources functions and the integrity of floodplains to the extent practicable by avoiding and minimizing actions and changes, including induced development, that are incompatible with floodplain functions;”
 - Chapter II, Section 2.H.(2)(b) (page 10 lines 44-45) states “Minimize - If adverse impacts cannot be avoided, then minimize those impacts by modifying the alternative to the extent appropriate and practicable.”
 - Chapter II, Section 2.H.(2)(b) (page 11 lines 1-2) states “Compensate – If

unavoidable adverse impacts remain, then compensatory mitigation is required to the extent practicable.”

- Chapter II, Section 2.J. (page 11 line 45 through page 12 line 1) states “Alternative solutions, including structural and nonstructural elements, must avoid, reduce and mitigate the risks of such threats to the extent practicable.”
- Chapter II, Section 3.I.(2) (page 18 lines 12-14) states “To the extent practicable, quantify benefits and costs and express them in monetary terms and for quantified effects that are not monetized utilize metrics that allow comparisons and tradeoffs to be made evident;”
- Chapter II, Section 2.H.(1) (page 10 lines 30-32) states “Accordingly, each alternative shall include mitigation developed in coordination with responsible natural resource management authorities and determined to be appropriate by the decision maker.” What are the criteria by which the “decision maker” determines the mitigation is “appropriate”?
- Chapter II, Section 3.C. (page 14 lines 41-43) states “This includes any current or future planning by the agency or others and expected implementation that is related to but not part of the study under consideration.” How is “future” defined and what degree of certainty of that future is expected? Suggest changing “future” to “reasonably foreseeable”, consistent with NEPA terminology.

Threshold or standard for evaluating which projects should be covered by the revised P&G

- Several terms used in the Proposed P&S regarding the projects that are covered by the revised P&G are not defined and could allow for discrepancies in how the Proposed P&S is applied to projects across different agencies. Suggest defining the terms in the Proposed P&S or stating that the terms will be defined by each agency in the agency’s specific procedures, recognizing that could result in inconsistency across agencies.
 - Chapter II, Section 1.A. (page 4 lines 6-16) states: “Water and related resources implementation studies covered by these Principles and Standards investigate and recommend Federal implementation of site-specific projects and project modifications. “Projects” include significant structures and landform changes, and any nonstructural plans that might be implemented. Modifications include the re-evaluation of implemented projects, as well as those authorized but not yet implemented. Modifications also include significant changes in features or operations that materially affect project impacts, rehabilitation, safety, reallocation, termination, and removal. Implementation studies include pre- and post authorization project formulation or evaluation studies undertaken by Federal agencies.”

What is meant by “significant” and “significant changes” and “materially affect”?
What are the specific thresholds for these terms?

- Chapter II, Section 1.B. (page 4 lines 32-33) states: “The Principles and

Standards do not apply to routine project operations, basic maintenance and minor repairs, or watershed plans or regulatory activities.”

What is meant by “routine project operations” and “basic maintenance” and “minor repairs”? What are the specific thresholds for these terms?

- Chapter II, Section 3.E. (page 16 lines 4-6) states “Statements shall be considered to address whether existing agency owned and operated projects or systems within the study area serve contemporary needs or may warrant modifications.”

To what extent will existing projects be reevaluated?

Comparison of the non-quantifiable impacts

- Several sections of the Proposed P&S (listed below) refer to evaluating effects or impacts that are not quantifiable. How can a valid and fair comparison of alternatives be performed if impacts are not quantified in an appropriate, acceptable manner?

- Chapter II, Section 2.B. (page 6 lines 7-9) states “evaluations shall focus on identifying ecological service and intrinsic natural value changes and the significance of those changes”

How is “intrinsic natural value” quantified?

- Chapter II, Section 3.I.(3) (page 18 lines 16-17) states “Estimate the net overall contribution to each of the study objectives, quantitatively when possible;”

How can a comparison be performed if impacts are not quantified?

- Chapter II, Section 3.J.(3) (page 22 lines 43-45) states “The comparison, screening, and selection of alternatives shall consider both monetary and non-monetary impacts, including significant impacts that are not quantified.”

How can a comparison be performed if impacts are not quantified?

- Chapter II, Section 3.K.(1)(b) (page 23 lines 22-24) “The recommended plan must provide combined beneficial effects for the Nation that outweigh the combined adverse effects considering all significant monetary and non-monetary impacts, both quantified and unquantified”

How can a comparison be performed if impacts are not quantified?

Balance the comparison of monetary and non-monetary impacts (5 sub-categories)

- Chapter II, Section 3.I.(4) provides categories for evaluating the effects of different alternatives. While the Proposed P&S acknowledges that these effects may result in impacts with different units of measurement and/or impacts that are not quantified, there is little elaboration on balancing the comparison across the categories in a consistent, integrated manner.
- Chapter II, Section 2.G. (page 10 lines 9-14) states “In addition to fully documenting both

monetary and non-monetary effects, planners shall strive to monetize currently non-monetized units to the extent possible as the ability to monetize various services becomes more well-established. Any application of non-monetary parameters must utilize consistent metrics in order to understand and compare alternatives.”

How are monetary and non-monetary effects to be valued or weighed against one another? The process appears to allow for a great deal of subjectivity.

- Chapter II, Section 3.J.(3) (page 22 line 43 through page 23 line 5) states “The comparison, screening, and selection of alternatives shall consider both monetary and non-monetary impacts, including significant impacts that are not quantified. Trade-offs across all impacts should be fully displayed and explained to support all screening and selection decisions. In situations involving impacts with different units of measurement and/or impacts that are not quantified, threshold or break-even analyses should be applied as needed to help compare alternatives and support tradeoff decisions. This includes the analysis and display of incremental changes in the various impacts due to incremental changes in the scale and composition of alternatives.”

While methods for evaluating the various quantified and unquantified impacts are discussed in this section, the process still appears to allow for a great deal of subjectivity and inconsistency in how those evaluations are performed. The Proposed P&S evaluation of alternatives using the five sub-categories that can include impacts with different units of measurement and/or impacts that are not quantified is drastically different from the evaluation of alternatives under the existing P&G instituted in 1983 which provides four separate accounts for evaluation, however only the NED account is required, which contains only impacts that can be monetized. Suggest the Proposed P&S describe more completely the balancing of impacts with different units of measurement.